

## CLAIMS

We claim:

1. A method for automatically adjusting the intensity of a lighting element based on feedback from an ambient light source, the method comprising:  
receiving light from the ambient light source;  
transmitting a signal to a driver;  
analyzing the signal transmitted to the driver; and  
delivering power to the lighting element based on the analysis.
2. The method of claim 1 wherein receiving light from the ambient light source includes receiving light through a photosensitive element.
3. The method of claim 1 wherein transmitting a signal to a driver includes transmitting an electrical signal to the driver.
4. The method of claim 1 wherein transmitting a signal to a driver includes transmitting a signal to the driver that is proportional to the intensity of the ambient light.
5. The method of claim 1 wherein analyzing the signal transmitted to the driver includes determining the amount of power to be delivered to the lighting element.
6. The method of claim 1 wherein delivering power to the lighting element includes delivering power based upon the signal transmitted to the driver.
7. The method of claim 1 wherein delivering power to the lighting element includes delivering power through an electrical power delivery line.
8. A method for automatically adjusting the intensity of a lighting element based on feedback, the method comprising:

receiving light from a light source;  
transmitting a signal to a driver;  
analyzing the signal transmitted to the driver; and  
delivering power to the lighting element based on the analysis.

9. The method of claim 8 wherein receiving light from the light source includes receiving light through a photosensitive element.

10. The method of claim 8 wherein transmitting a signal to a driver includes transmitting an electrical signal to the driver.

11. The method of claim 8 wherein transmitting a signal to a driver includes transmitting a signal to the driver that is proportional to the intensity of the light source.

12. The method of claim 8 wherein analyzing the signal transmitted to the driver includes determining the amount of power to be delivered to the lighting element.

13. The method of claim 8 wherein delivering power to the lighting element includes delivering power based upon the signal transmitted to the driver.

14. The method of claim 8 wherein delivering power to the lighting element includes delivering power through an electrical power delivery line.

15. A system comprising:  
an integrated circuit;  
a driver coupled to control the delivery of power;  
a first photosensitive element coupled to transmit signals to the driver;  
an ambient source of light coupled to transmit light to the first photosensitive element;  
a second photosensitive element coupled to transmit signals to the driver; and  
a lighting element coupled to transmit light to the second photosensitive element.

16. The system of claim 15, wherein the driver, the first photosensitive element, and the second photosensitive element are located within the integrated circuit.

17. The system of claim 15, wherein a monolithic piece of semiconductor material encapsulates the driver, the first photosensitive element, and the second photosensitive element.

18. The system of claim 15, wherein the first photosensitive element and the second photosensitive element are covered by a transparent material.

19. The system of claim 15, wherein the ambient source of light is external to the integrated circuit.

20. A method for automatically detecting the failure of a lighting element within an integrated circuit, the method comprising:

- receiving light from the lighting element;
- analyzing the light received from the lighting element; and
- detecting failure of the lighting element based on the analysis.

21. The method of claim 20 wherein receiving light from the lighting element includes receiving light through a photosensitive element.

22. The method of claim 20 wherein analyzing the light received from the lighting element includes comparing the actual steady-state brightness of the light from the lighting element with a set reference.

23. A system for automatically adjusting the intensity of a lighting element based on feedback, the system comprising:

- means for receiving light from a light source;
- means for transmitting a signal associated with the light source to a driver;
- means for analyzing the signal transmitted to the driver; and
- means for delivering power to the lighting element based on the analysis.

24. The system of claim 23, wherein the means for receiving light from a light source includes means for receiving ambient light.

25. The system of claim 23, wherein the means for receiving light from a light source includes means for receiving light from the lighting element.

26. The system of claim 23, wherein the means for receiving light from a light source includes means for guiding light onto a photosensitive element.

27. The system of claim 23, wherein the means for receiving light from a light source includes means for detecting a failure in the lighting element.

28. The system of claim 23, wherein the means for receiving light from a light source includes means for receiving light through a photosensitive element.

29. The system of claim 23, wherein the means for transmitting a signal associated with the light source to a driver includes means for transmitting an electrical signal to the driver.

30. The system of claim 23, wherein the means for transmitting a signal associated with the light source to a driver includes means for transmitting a signal to the driver that is proportional to the intensity of the light source.

31. The system of claim 23, wherein the means for analyzing the signal transmitted to the driver includes means for determining the amount of power to be delivered to the lighting element.

32. The system of claim 23, wherein the means for delivering power to the lighting element includes means for delivering power based upon the signal transmitted to the driver.

33. A method for automatically adjusting the intensity of a lighting element based on feedback from the lighting element, the method comprising:

receiving light from the lighting element;  
transmitting a signal to a driver;  
analyzing the signal transmitted to the driver; and  
delivering power to the lighting element based on the analysis.

34. The method of claim 33 wherein receiving light from the lighting element includes receiving light through a photosensitive element.

35. The method of claim 33 wherein transmitting a signal to a driver includes transmitting an electrical signal to the driver.

36. The method of claim 33 wherein transmitting a signal to a driver includes transmitting a signal to the driver that is proportional to the intensity of the light from the lighting element.

37. The method of claim 33 wherein analyzing the signal transmitted to the driver includes determining the amount of power to be delivered to the lighting element.

38. The method of claim 33 wherein delivering power to the lighting element includes delivering power based upon the signal transmitted to the driver.

39. The method of claim 33 wherein delivering power to the lighting element includes delivering power through an electrical power delivery line.